

Existing Resource MPCE Options

For each existing resource MPCE option to be evaluated (for example, install scrubbers on both units at GGS) , the following inputs are required:

Note: Cost data is assumed to be provided in 2011\$, unless otherwise indicated

		Low	Base	High
Earliest year available	Year			
Upgrade Capital Cost*	\$ Millions			
Upgrade Fixed O&M Cost*	\$ Millions/yr			
Upgrade Variable O&M Cost*^	\$/MWh			
Capacity Impact	net MW			
Existing average annual heat rate	Btu/net kWh			
Heat rate w/MPCE equipment	Btu/net kWh			
Outage length impact	wks			
Existing SO ₂ emission rate	tons/net GWh			
SO ₂ emission rate w/ MPCE equipment	tons/net GWh			
Existing NO _x emission rate	tons/net GWh			
NO _x emission rate w/ MPCE equipment	tons/net GWh			
Existing Hg emission rate	lbs/ net GWh			
Hg emission rate w/ MPCE equipment	lbs/ net GWh			
Existing CO ₂ emission rate	metric tons/net GWh			
CO ₂ emission rate w/ MPCE equipment	metric tons/net GWh			

* Low/Base/High (10th/50th/90th percentile) range required for these inputs

^ Excludes additional aux. power costs and allowance credits

Carbon Capture & Sequestration (CCS) retrofit for existing coal-fired resources

Beginning year for CCS retrofit	Years			
CCS Capital Cost*	\$ Millions			
CCS Fixed O&M Cost*	\$ Millions			
CCS Variable O&M Cost*	\$/MWh			
Capacity Impact	MW			
Heat rate Impact	Btu/kWh			
SO ₂ emission rate impact	tons/GWh			
NO _x emission rate impact	tons/GWh			
Hg emission rate impact	lbs/GWh			
CO ₂ emission rate impact	metric tons/GWh			

* Low/Base/High (10th/50th/90th percentile) range required for these inputs

Emission rates can also be provided in lb/MMBtu

Depending upon the option, there could be separate inputs for each unit